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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,167	01/08/2002	Helmut Kreuzer	1764	4987

7590

12/02/2005

Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

EXAMINER

KIM, PAUL D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/937,167	Applicant(s) KREUZER ET AL.	
	Examiner Paul D. Kim	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 4-9 and 11 is/are allowed.
- 6) ☐ Claim(s) 1-3 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/12/2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. (US PAT. 6,317,962).

Adachi et al. teach a process of making a stator comprising steps of: providing a substantially parallelepiped shape (50) with slots (51a) extending parallel on one side as shown in Fig. 2; inserting a core winding (52) is inserted by its winding sides (51a) as shown in Fig. 3; and reshaping the core (50) together with the core winding (52) is into a cylindrical ring shape (5) with radially inward-oriented slots as shown in Fig. 1. Also, Adachi et al. teach that the core winding (52) is preformed into a shape which is generally flat and which needs not be further formed within the slots (51a) as shown in

FIG. 2, which is equivalent with the recitation of "all winding sides (or all three winding sides as per claim 21) that are inserted into each slot are put into a slot shape in a tool and reshaped plastically before being inserted into the slot to permanently assume the slot shape". Even though Adachi et al. do not teach the tool for plastically reshaped all winding sides before being inserted into the slot to permanently assume the slot shape, the core winding of Adachi et al. has been already preformed (plastically reshaped) in the slot shape in a tool (not shown) and does not need further formed within the slots (which is equivalent with permanently assume the slot shape) before being inserted into the slot (see also col. 2, lines 50-67). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the core winding of Adachi et al. by using the tool for reshaping the core winding into permanently assume the slot in order to reduce the procedure (or extra steps) to make the stator.

In addition, even though Adachi et al. do not teach that the core winding is pressed into the slot, it would be obvious to apply a force (equivalent with press) either by hand or machine to put the core winding into the slot in order to arrange the core winding relatively into the slots (as per claim 3).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Rich (US PAT. 4, 102,040).

Adachi et al. teach all of the limitations as set forth above except one half-tooth each of core ends in the circumferential direction. Rich teaches a process of making a stator including a process of bending a core having slots (as shown in Fig. 3), wherein

one half-tooth (5) is located at each of core ends in the circumferential direction as shown in Fig. 2 in order to weld one end to the other easily (see col. 9, lines 48-63). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the core winding of Adachi et al. by one half-tooth being at each of core ends in the circumferential direction as taught by Rich in order to weld one end to the other easily.

Allowable Subject Matter

5. Claims 4-9 and 11 are allowed.

Response to Arguments

6. Applicant argues that the prior art of record fails to disclose the claimed invention such as all the winding sides (as per claim 1) or all three winding sides (as per claim 21) that are inserted into each slot are pressed into a slot shape. Applicant indicates that the pressed winding side of the Adachi et al. is two-dimensional, not three dimensional as recited in the claim. Examiner traverses the argument. The three winding sides are not the same as three-dimensional. Also, Adachi et al. teach that the core winding is preformed into a shape which is generally flat and which needs not be further formed within the slots before the insertion. When the winding is pressed to have a flat shape as shown in Fig. 3, all winding sides should be pressed such as in three dimensional sides X and Y axis (2 dimension) including Z axis for reducing a thickness of the windings.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Friday between 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D. Kim
Patent Examiner
Art Unit 3729